

Claims

1. A polymeric coextruded multilayer web, the web comprising:
at least two layers that are discontinuous in the cross-web direction, each layer comprising a plurality of distinct phases that are substantially continuous in the down-web direction; and
at least one layer that is substantially continuous in both the cross-web and down-web directions;
wherein said web has an x-axis that is in the cross-web direction of the web, a y-axis that is in the down-web direction of the web and a z-axis that is in the thickness direction of the web, and wherein the substantially continuous layer(s) lacks weld lines in the y-z plane of the web.
2. The web of claim 1 wherein said substantially continuous layers independently comprise a material selected from the group consisting of pressure-sensitive adhesives, thermoplastic materials, elastomeric materials, melt processable foams, high viscosity liquids, and mixtures thereof.
3. The web of claim 1 wherein said discontinuous layers independently comprise a material selected from the group consisting of pressure-sensitive adhesives, thermoplastic materials, elastomeric materials, melt processable foams, high viscosity liquids, and mixtures thereof.
4. The web of claim 1 wherein said continuous layers comprise an acrylic pressure-sensitive adhesive and wherein said discontinuous layers independently comprise a material selected from the group consisting of a non-pressure-sensitive adhesive, a thermoplastic polyolefin, and combinations thereof.
5. The web of claim 4 wherein said thermoplastic polyolefin is an ethylene vinyl acetate copolymer, an ethylene/poly- α -olefin copolymer, amino-compatible polyolefin or a blend of ethylene/poly- α -olefin and amino-compatible polyolefin.
6. The web of claim 1 wherein said substantially continuous layers comprise a pressure-sensitive adhesive that is foamed and wherein said discontinuous layers comprise a material selected from the group consisting of pressure-sensitive adhesives, thermoplastics and homopolymers and copolymers thereof, and combinations thereof.

7. The web of claim 1 wherein said substantially continuous layers and said discontinuous layers comprise thermoplastic homopolymers or copolymers and mixtures and blends thereof.

8. The web of claim 1 wherein said substantially continuous layers comprise at least one polyolefin and wherein said discontinuous layers comprise a material selected from the group consisting of cyclic polyolefins or blends of cyclic polyolefin with non-cyclic polyolefin, polyamides, styrenic polymers and homopolymers and copolymers thereof.

9. The web of claim 1 wherein said substantially continuous layers comprise a porous film.

10. The web of claim 9 wherein said substantially continuous layers comprise polypropylene and oil and wherein said discontinuous layers have a higher tensile strength than said continuous layers.

11. The web of claim 9 wherein said discontinuous layers comprise polypropylene.

12. The web of claim 9 wherein said discontinuous layers comprise a dye or colorant.

13. The web of claim 1 wherein said discontinuous layers alternate with said at least one continuous layer.

14. The web of claim 1 wherein said web has two substantially continuous layers between each set of discontinuous layers.